

REMARKS

In the Office Action mailed November 1, 2006, claim 1 was rejected under 35 USC 103(a) as being obvious over Dirkzwager (WO 99/58480). As noted by the Examiner in the Office Action, Dirkzwager discloses a process for the preparation of a styrene comprising the dehydration of 1-phenylethanol in the presence of a dehydration catalyst where the catalyst consists of shaped alumina catalyst particles having a surface area (BET) in the range of from 80-140 m²/g and a pore volume (Hg) in the range of 0.35 to 0.65 ml/g. Claim 1 is directed to a process for the preparation of styrene in which the dehydration catalyst has a pore volume of more than 0.65 ml/g. As set forth in the last response, the present invention provides superior results when compared to the process of Dirkzwager. These results are set forth in the examples in the application. Accordingly, Applicants submit that it would not have been obvious to modify Dirkzwager to utilize a larger pore volume catalyst.

In the Office Action, claims 1-4 were rejected under 35 USC 103(a) as being unpatentable over Dirkzwager in view of Jacques (US 4,247,735). Jacques is directed to a process for the production of spheroidal alumina shaped articles. As set forth in column 4, lines 34-44 of Jacques, these particles can have a pore volume from 0.3 cm³/g to 2.8 cm³/g.

There is no teaching or suggestion in Jacques that particles having a size greater than 0.65 ml/g would provide better results than a catalyst having a smaller pore volume in a process for the preparation of styrene. Accordingly, there is no teaching or suggestion to combine the teachings of Jacques with the teachings of Dirkzwager.

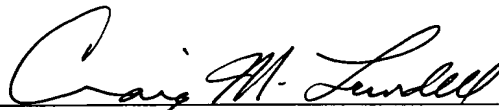
Additionally, Jacques issued as a patent on June 16, 1981 while the Dirkzwager application has a priority date of May 11, 1998. Accordingly, since the teachings of Jacques were available at the time of the invention of Dirkzwager but were not utilized, Applicants submit that it would not have been obvious to utilize a catalyst having a larger pore volume in the process of Dirkzwager. There is no teaching or suggestion in Dirkzwager that a catalyst with a larger pore volume would provide the surprisingly better results demonstrated by the present invention.

Accordingly, Applicants submit that it would not have been obvious to combine the teachings of Dirkzwager and Jacques to arrive at the present invention. The Examiner has not cited any teaching or suggestion in either of the references which would suggest to one of skill in the art that improved results in a process for producing styrene could be obtained by using a catalyst with a larger pore volume in the process of Dirkzwager.

In view of the foregoing, Applicants submit that the claims are in condition for allowance and favorable consideration by the Examiner is requested. Should the Examiner find any impediment to the allowance of the claims which could be corrected by a telephone interview, the Examiner is requested to initiate such an interview with the undersigned.

Respectfully submitted,

JOHANNES A. M. VAN BROEKHOVEN, et al

By 
Attorney, Craig M. Lundell
Registration No. 30,284
(713) 241-2475

P.O. Box 2463
Houston, Texas 77252-2463